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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, CINDY

ART UNIT PAPER NUMBER

2161

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/090,963

Applicant(s)

CHAPMAN, DENNIS E.

Examiner

Cindy Nguyen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/11/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is in response to communication filed 09/02/05.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 07/11/05 was filed after the mailing date of the non final rejected on mailed 06/02/05. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive.

Applicant argued that Applicant's claimed "snapshots" are totally different from those disclosed by HuXoll, Applicant's claimed novel snapshots are copies of pointers, not the full image as taught by Huxoll. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., snapshots are copies of pointers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argued that Huxoll has no disclosure of Applicant's claim novel preparing the database for backup by rendering the database coherent. In response,

Huxoll clearly disclose preparing the database for backup by rendering the database coherent as the files may be database file associated with a database, and prior to registering one or more files with the snapshot software component technology, initialization processing may be executed, the initialization processing may prepare the one or more file for the snapshot, the snapshot technology may determine to handle read request and write request received during the file snapshot of each registered file see col. 10, lines 18-52.

Applicant argued that Huxoll is not disclosed the Applicant's claimed novel creating a snapshot of a file system, the file system comprising file including the database and associated log files while the file system is active and available for access by users. In response, Huxoll clearly discloses: creating a snapshot of a file system as creating snapshot col. 10, lines 8-25, the file system comprising file including the database and associated log files (database has log files col. 7, lines 3-9) while the file system is active and available for access by users (client can reads and write for each registered file in database files col. 10, lines 8 to col. 11, lines 8.

Applicant argued that Huxoll has no disclosure of Applicant's claimed saving of a snapshot, where in the vocabulary of the present patent application, a snapshot is create by saving only the pointers to data. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a snapshot is create by saving only the pointers to data) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### **1. Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**2. Claims 1, 2, 14, 17 and 22-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Huxoll (US 6799189).**

Regarding claim 1, Huxoll discloses: a method for generating a backup of a database, the method comprising the steps of: preparing the database for backup by rendering the database substantially coherent so that the database can be restored without loss of data (col. 10, lines 36 to col. 11, lines 33, Huxoll);

Creating a snapshot of a file system, the file system comprising files including the database (file system, col. 13, lines 17, Huxoll) and associated log files (col. 10, lines 7-35, Huxoll) while the file system is active and available for access by users (col. 5, lines 33-46, Huxoll).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Huxoll discloses: the steps of generating snapinfo files in the file system including database log files and data associate with the backup, the data associated with the backup used for database restore procedures (col. 9, lines 14-40, Huxoll).

Regarding claim 14, Huxoll discloses: method for generating a point in time restoration from a set of backups, each of the set of backup comprising a snapshot and copies of a set of log files associated with the snapshot, the method comprising the steps of selecting one of the set of backups to generate the point in time restoration therefrom (col. 8, lines 42-65, Huxoll);

Copying the database files from the snapshot to an active file system (col. 9, lines 7-13, Huxoll); and

Copy the copies of the set of log files to the active file system (col. 9, lines 14-40, Huxoll).

Regarding claim 17, Huxoll discloses: a method for generating a backup of a set of database files associated with the database program and a set of associated log files (col. 10, lines 7-35, Huxoll), the method comprising the steps of: performing a snapshot operation on the set of database files (col. 10, lines 7-35, Huxoll); and

Copying the set of log files to a directory associated with the backup (col. 9, lines 41 to col. 10, lines 52, Huxoll).

Regarding claims 22, 25, 28, 30-32, Huxoll discloses: a method, a file system, a computer readable media and electromagnetic signals propagating on a computer network comprising: rendering the file system coherent in preparation for generating the backup, to product a coherent file system (col. 10, lines 36 to col. 11, lines 33 and 506, 508, fig. 5, Huxoll); creating a snapshot of the coherent file system, the snapshot created as a copy of a set of pointers to data, the data stored in the coherent file system (col. 10, lines 7-35, Huxoll).

Regarding claims 23 and 26, all the limitations of these claims have been noted in the rejection of claims 22 and 25 above, respectively. In addition, Huxoll discloses: incorporating a log file into the file system to render the file system coherent (col. 11, lines 15-37, Huxoll).

Regarding claims 24 and 27, all the limitations of these claims have been noted in the rejection of claims 22 and 25 above, respectively. In addition, Huxoll discloses: maintaining the file system available for access by users while generating the backup (col. 5, lines 7-20, Huxoll).

### **3. *Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 3, 4, 6, 8-11, 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Huxoll et al. (U.S 6799189) in view of Ohran (U.S 5835953).**

Regarding claim 3, all the limitations of this claim have been noted in the rejection of claim 2 above. However, Huxoll didn't disclose: the steps of verifying the database for coherency and updating the snapinfo files with results of the verification of the database. On the other hand, Ohran discloses: verifying the database for coherency (col. 17, lines 64 to col. 18, lines 4, Ohran), and updating the snapinfo files with results of the verification of the database (col. 17, lines 49-55, Ohran). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the steps of verifying the database for coherency and updating the snapinfo files with results of the verification of the database in the system of Huxoll as taught by Ohran. The motivation being to enable the backup system stores these changes or apply the changes to the backup storage device in order to bring the backup storage device current to a particular point in time.

Regarding claims 4 and 20, Huxoll/Ohran discloses: a method and a computer readable medium, including instructions executing on a computer for generating a point in time restoration of a set of database files and a set of associated log files to an active file system, the method comprising the steps of : selecting, by a user (client) a backup to restore therefrom, the backup comprising a snapshot of the file system including the set of database files and copies of the associated log files (col. 9, lines 41 to col. 10, lines 52, Huxoll);

Verifying the selected backup for coherency (col. 17, lines 22-30, Ohran);

Copying, in response to the backup being coherent, the snapshot of the set of database files to the active file system (col. 11, lines 14-33, Huxoll); and



Copying, in response to the backup being coherent, the copies of the associated log files to the active file system (col. 11, lines 14-33, Huxoll).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 4 above. In addition, Huxoll /Ohran discloses: wherein the backup is selected from a set of backups associated with the active file system (col. 17, lines 66 to col. 18, lines 4, Ohran).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 4 above. In addition, Huxoll /Ohran discloses: wherein the database files and log files are associated with electronic mail message (105, fig. 1 of the application invention).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 4 above. In addition, Huxoll /Ohran discloses: wherein the set of associated log files further comprises data to be incorporated into the set of database files (col. 10, lines 17-24 and col. 9, lines 38-40, Huxoll).

Regarding claims 10 and 21, Huxoll/Ohran discloses: a method and a computer-readable medium, including instructions executing on a computer for generating a point in time restoration of a set of database files and a set of associated log files to an active file system, the method comprising the steps of : selecting, a backup to restore therefrom, the backup comprising a snapshot of a file system including the set of database files (col. 13, lines 8-24, Huxoll), copies of the associated log files and copies of log files associated with a set of snapshots created later in time than the selected snapshot;

Verifying the selected backup (col. 20, lines 36-50, Ohran);

Copying, in response to the backup being successful verified, the snapshot of the set of database files to the active file system (col. 11, lines 14-33, Huxoll);

Copying, in response to the backup being successfully verified, the copies of the associated log files to the active file system (col. 11, lines 14-33, Huxoll); and

Copying the copies of the log files associated with the set of snapshots created later in time than the selected snapshot to the active file system (col. 10, lines 35-64, Huxoll).

Regarding claim 11, all the limitations of these claims have been noted in the rejection of claim 10 and 4 above. It is therefore rejected as set forth above.

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 17 above. In addition, Huxoll/Ohran discloses: wherein the method further comprises the step of validating a snapshot generated by the snapshot operation (col. 9, lines 58 to col. 10, lines 7, Huxoll).

Regarding claim 19, all the limitations of this claim have been noted in the rejection of claim 18 above. In addition, Huxoll /Ohran discloses: wherein the method further comprises the step of marking, in response to a successful validation of the snapshot, the snapshot as a backup snapshot (col. 9, lines 58 to col. 10, line 7, Huxoll).

**5. Claims 5, 7, 12, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huxoll et al. (U.S 6173293) in view of Ohran (U.S 5835953) and further in view of Lewis et al. (U.S 2002/0083037) (Lewis).**

Regarding claims 5, 12 and 16, all the limitations of these claims have been noted in the rejection of claims 4, 10 and 14 above, respectively. However, Huxoll/Ohran didn't disclose: wherein the step of copying the snapshot to the active file system further comprises the step of

copying contents of a root inode associated with the snapshot to a root inode associated with the active file system. On the other hand, Lewis discloses: wherein the step of copying the snapshot to the active file system further comprises the step of copying contents of a root inode associated with the snapshot to a root inode associated with the active file system (page 3, 0050, Lewis). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the step of copying contents of a root inode associated with the snapshot to a root inode associated with the active file system in the combination system of Huxoll/Ohran as taught by Lewis. The motivation being to enable the system had a collection of snapshots of the volume, each snapshot includes all the information of a root block and is equivalent to an older root block from a previous active file system, when the snapshot performs, it includes a collection of pointers that directly or indirectly to the same inode file as the root block of the active file system.

Regarding claims 7, 13 and 15, all the limitations of these claims have been noted in the rejection of claims 4, 10 and 14 above, respectively. In addition, Huxoll/Ohran/Lewis discloses wherein the method further comprises the step of renaming the copies of the associated log files to the set naming convention (page 3, 0051, Lewis).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **7. Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen  
November 26, 2005



**FRANTZ COBY**  
**PRIMARY EXAMINER**